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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,054	12/03/2001	Andreas Werner Speitling	OSTEONICS 3.0-349	9208

530 7590 06/27/2003

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EXAMINER
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YOUNG, MICAH PAUL

ART UNIT	PAPER NUMBER
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1615

DATE MAILED: 06/27/2003

8

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Applicati n No.

10/005,054

Applicant(s)

SPEITLING, ANDREAS WERNER

Examiner

Micah-Paul Young

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-- The MAILING DATE of this c mmunication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

## **DETAILED ACTION**

### ***Double Patenting***

1. Claim 7 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 8.

When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Objections***

2. Claim 8 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim is dependent from claim 7 yet recite the exact same limitation to the type of ceramic used in the invention.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5, 13-16, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Pratt et al (USPN 4,849,223). The claims are drawn to a medical device with an antimicrobial coating. The coating layer is plastic and releases silver ions. Claim 22 is drawn to a method for producing an antibacterial effect on a device comprising incorporating into a coating an antibacterial substance.

Pratt et al teaches an antimicrobial coating material for medical devices. The medical devices can have rubber or latex substrates. The antimicrobial coating material comprises silver ions (col. 3, lin. 5- 20, lin. 50 –56; col. 4, lin. 33 – 40; examples). The device also comprises various oxides including tantalum oxide in the coating. The coating comprises silver ions mixed with tantalum oxide (col. 2, lin. 51 – col. 4, lin., 33). The surface of the device can be smooth dependent upon the intended use of the device (col. 4, lin. 8 – 13). The coating material can also be incorporated into bone cements so that the cement would produce an antimicrobial effect once in the body (*Id.*). The reference also discloses a method for making the device where oxides are incorporated into the coating. These disclosures render the claimed anticipated.

5. Claims 1-6 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Jacobson et al (USPN 5,180,585). The claims are drawn to a medical device with an antimicrobial coating. The coating layer is plastic and releases silver ions. The substrate is recited to be plastic such as polyetherether ketone. Claim 22 is drawn to a method for producing an antibacterial effect on a device comprising incorporating into a coating an antibacterial substance.

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Jacobson et al teaches an antimicrobial coating composition. The composition can comprise silver ions, while the substrate can comprise polyetherether ketone (PEEK). The antimicrobial composition can be incorporated or coated onto medical devices for implantation such as sutures, or for dental purposes (col. 4, lin. 18 – 30; col. 5, lin. 33 – 40; col. 9, lin. 12-15; col. 11, lin. 36 – 60). These disclosures render the claims anticipated.

6. Claims 1, 2, 7, 8, 11, 12, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Gao et al (USPN 6,113,993). The claims are drawn to a medical implant comprising an antimicrobial device comprising a ceramic material such as tricalcium phosphate.

Gao et al teaches a medical implant with an antimicrobial coating. The implant further comprises tricalcium phosphate (TCP) and hydroxyapatite (HA) in the coating composition (Abstract; col. 3, lin. 4 – 10; examples). These disclosures render the claims anticipated.

7. Claims 1, 2, 9, 10, 17 – 19 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Davidson (USPN 5,685,306). The claims are drawn to a medical implant with an antimicrobial coating comprising ceramics such as titanium nitride, zirconium, and niobium, or diamond-like carbon. The claims also recite that an electrical voltage is applied to the surface of the device.

Davidson discloses medical implants comprising a coating where antimicrobial agents can be applied. The coating comprises ceramic like coatings such as titanium zirconium oxides, and diamond-like carbon (col. 6, lin. 37 – 53; col. 7, lin. 55 – 60). One of the embodiments of the invention of the reference is that of a pacemaker lead, electrical signal transmitter, or a

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defibrillator. An external source would apply the electrical voltage in the defibrillator and signal transmitter embodiments. In this embodiment electrical voltages would be applied to the surfaces of the device, electrostatically charging the surface of the devices (col. 12, lin. 1 – col. 13, lin. 63). These disclosures render the claims anticipated.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sarangapani (USPN 5,328,954), Edwards et al (USPN 5,413,788), Burell et al (USPN 5,454,886 and 5,681,575) all disclose medical devices with antimicrobial coatings applied to them. The coatings comprise metallic ions, and ceramic materials. These devices can be used to carry electrical signals.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Micah-Paul Young whose telephone number is 703-308-7005. The examiner can normally be reached on M-F 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7648 for regular communications and 703-746-7648 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Micah-Paul Young  
Examiner  
Art Unit 1615

MP Young  
June 24, 2003

THURMAN K. PAGE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1600